



UNITED STATES PATENT AND TRADEMARK OFFICE

M-F
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,589	01/06/2006	Takahiro Yamada	283620US6PCT	3668
22850	7590	09/25/2006	EXAMINER	
C. IRVIN MCCLELLAND				RENNER, CRAIG A
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.				ART UNIT
1940 DUKE STREET				PAPER NUMBER
ALEXANDRIA, VA 22314				2627

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/563,589	YAMADA ET AL.
	Examiner	Art Unit
	Craig A. Renner	2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-7 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 1-7 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 06 January 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 01/06/2006 & 04/19/2006.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/JP05/08844, filed on 10 May 2005.

Drawings

2. The drawings were received on 06 January 2006. These drawings are accepted.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

4. The abstract of the disclosure is objected to because it is not "within the range of 50 to 150 words" and because it does not avoid the "form and legal phraseology often used in patent claims," such as "means" appearing in lines 9 and 12 thereof. Appropriate correction is required. See MPEP § 608.01(b).

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is

requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In lines 3-8 of claim 2, it is indefinite as to whether the "elastic flap portion" and "protruded portion" are part of the "cartridge drop preventive means" set forth in line 19 of independent claim 1, or if the "elastic flap portion" and "protruded portion" are in addition to the "cartridge drop preventive means" set forth in line 19 of independent claim 1.

b. In lines 6-7 of claim 3, "the protruded portion of the cartridge drop preventive means" is indefinite because it lacks clear and/or positive antecedent basis. Note that the "protruded portion" has not been set forth as a component of the "cartridge drop preventive means" as questioned in paragraph 7a, supra.

c. In lines 9-10 in claim 5, "the side surface plate including the recessed portion" and "the recessed portion" are indefinite because they lack clear and/or positive antecedent basis.

e. Claim 4 inherits the indefiniteness associated with base claim 2 and stands rejected as well.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuda et al. (US 2005/0251816).

Matsuda et al. (US 2005/0251816) teaches a disk recording and/or reproducing apparatus (101) comprising recording and/or reproducing means (includes 104, for instance, in at least an equivalent structural sense) disposed in a chassis (103), the recording and/or reproducing means recording and/or reproducing a disk cartridge (1); a cartridge holder (102) supported on the chassis movably between an insertion/removal position (as shown in FIG. 22, for instance), at which the disk cartridge is inserted or removed, and a recording/reproducing position (as shown in FIG. 1, for instance), at which the disk cartridge is recorded or reproduced by the recording and/or reproducing

means; an eject lever (105) disposed on the chassis so as to be movable in a disk cartridge insertion/removal direction (as shown in FIG. 4, for instance), the eject lever being pressed by an insertion end (3a) of the disk cartridge inserted in the cartridge holder to be moved in the disk cartridge insertion direction (as shown in FIG. 4, for instance); urge means (includes 106, for instance, in at least an equivalent structural sense) urging the eject lever in the disk cartridge removal direction; and cartridge drop preventive means (includes the unlabeled leaf-spring element shown in the lower left side of FIGS. 28B, 29B and 30B, for instance, in at least an equivalent structural sense) disposed on a side surface plate (102b) of the cartridge holder (as shown in FIGS. 28B, 29B and 30B, for instance), the cartridge drop preventive means making a sliding contact with a side surface of the disk cartridge stored in the cartridge holder (as shown in FIGS. 28B, 29B and 30B, for instance) [as per claim 1]; wherein the cartridge drop preventive means comprises an elastic flap portion giving the disk cartridge stored in the cartridge holder a braking force (as shown in FIGS. 28B, 29B and 30B, for instance); and a protruded portion disposed on a leading end portion of the elastic flap portion (as shown in FIGS. 28B, 29B and 30B, for instance), the protruded portion making a sliding contact with the side surface of the disk cartridge (as shown in FIGS. 28B, 29B and 30B, for instance) [as per claim 2]; wherein the disk cartridge includes a recessed portion (61) disposed in part of the side surface thereof; and when storage of the disk cartridge in the cartridge holder is completed, the protruded portion of the cartridge drop preventive means fits into the recessed portion (as shown in FIGS. 28B, for instance) [as per claim 3]; wherein the disk cartridge further includes a groove

portion (41) disposed in part of the side surface thereof; and when the disk cartridge is unloaded from the cartridge holder, the protruded portion first makes a sliding contact with the side surface of the disk cartridge and then fits into the groove portion (as shown in FIGS. 29B and 30B, for instance) [as per claim 4]; wherein the disk cartridge further includes an opening portion (34) that allows a disk (2) stored to face an outside and a shutter member (4) that is locked in a position of closing the opening portion (as shown in FIG. 12, for instance) and disposed so as to be movable between a position of opening the opening portion (as shown in FIG. 13, for instance) and the position of closing the opening portion (as shown in FIG. 12, for instance); and a side surface plate (102c) opposing the side surface plate including the recessed portion has a shutter lock release member (116) for releasing locking of the shutter member [as per claim 5]; wherein the disk cartridge has a side surface (3a) formed into an arc on the side of the insertion end (as shown in FIG. 1, for instance) [as per claim 6]; and wherein the cartridge drop preventive means is formed (as shown in FIGS. 28B, 29B and 30B, for instance) [as per claim 7].

As the claims are directed to a "disk recording and/or reproducing apparatus", per se, the method limitation(s) appearing in lines 3-5 of claim 7 can only be accorded weight to the extent that they affect the structure of the completed disk recording and/or reproducing apparatus. Note that "[d]etermination of patentability in 'product-by-process' claims is based on product itself, even though such claims are limited and defined by process [i.e., "cutting and raising the side surface plate of the cartridge holder", for instance], and thus product in such claim is unpatentable if it is the same as,

or obvious form, product of prior art, even if prior product was made by a different process", *In re Thorpe, et al.*, 227 USPQ 964 (CAFC 1985). Furthermore, note that a "[p]roduct-by-process claim, although reciting subject matter of claim in terms of how it is made [i.e., "cutting and raising the side surface plate of the cartridge holder", for instance], is still product claim; it is patentability of product claimed and not recited process steps that must be established, in spite of fact that claim may recite only process limitations", *In re Hirao and Sato*, 190 USPQ 685 (CCPA 1976).

10. Claims 1-3 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Publication No. 2004-079046.

Japanese Publication No. 2004-079046 teaches a disk recording and/or reproducing apparatus comprising recording and/or reproducing means (includes 72, for instance, in at least an equivalent structural sense) disposed in a chassis (1), the recording and/or reproducing means recording and/or reproducing a disk cartridge (60); a cartridge holder (2) supported on the chassis movably between an insertion/removal position (as shown in FIG. 6(a), for instance), at which the disk cartridge is inserted or removed, and a recording/reproducing position (as shown in FIGS 9 and 10, for instance), at which the disk cartridge is recorded or reproduced by the recording and/or reproducing means; an eject lever (5) disposed on the chassis so as to be movable in a disk cartridge insertion/removal direction (as shown in FIG. 12(a) and 12(b), for instance), the eject lever being pressed by an insertion end of the disk cartridge inserted in the cartridge holder to be moved in the disk cartridge insertion direction (paragraph

[0013], for instance); urge means (includes 8, for instance, in at least an equivalent structural sense) urging the eject lever in the disk cartridge removal direction (as shown in FIGS. 7(a) and 7(b), for instance); and cartridge drop preventive means (includes 30, for instance, in at least an equivalent structural sense) disposed on a side surface plate of the cartridge holder (as shown in FIG. 18(a), for instance), the cartridge drop preventive means making a sliding contact with a side surface of the disk cartridge stored in the cartridge holder (as shown in FIG. 18(a), for instance) [as per claim 1]; wherein the cartridge drop preventive means comprises an elastic flap portion (between 30 and 32) giving the disk cartridge stored in the cartridge holder a braking force (as shown in FIG. 18(a), for instance); and a protruded portion (30) disposed on a leading end portion of the elastic flap portion (as shown in FIG. 18(a), for instance), the protruded portion making a sliding contact with the side surface of the disk cartridge (as shown in FIG. 18(a), for instance) [as per claim 2]; wherein the disk cartridge includes a recessed portion (64) disposed in part of the side surface thereof; and when storage of the disk cartridge in the cartridge holder is completed, the protruded portion of the cartridge drop preventive means fits into the recessed portion (as shown in FIG. 18(a), for instance) [as per claim 3]; wherein the recording and/or reproducing apparatus inherently has the capability of accepting a disk cartridge that has a side surface formed into a wide arc on a side of an insertion end [as per claim 6]; and wherein the cartridge drop preventive means is formed (as shown in FIG. 15, for instance) [as per claim 7].

As the claims are directed to a “disk recording and/or reproducing apparatus”, per se, the method limitation(s) appearing in lines 3-5 of claim 7 can only be accorded

weight to the extent that they affect the structure of the completed disk recording and/or reproducing apparatus. Note that “[d]etermination of patentability in ‘product-by-process’ claims is based on product itself, even though such claims are limited and defined by process [i.e., “cutting and raising the side surface plate of the cartridge holder”, for instance], and thus product in such claim is unpatentable if it is the same as, or obvious form, product of prior art, even if prior product was made by a different process.” See *In re Thorpe, et al.*, *supra*. Furthermore, note that a “[p]roduct-by-process claim, although reciting subject matter of claim in terms of how it is made [i.e., “cutting and raising the side surface plate of the cartridge holder”, for instance], is still product claim; it is patentability of product claimed and not recited process steps that must be established, in spite of fact that claim may recite only process limitations.” See *In re Hirao and Sato*, *supra*.

Likewise, as the claims are directed to a “disk recording and/or reproducing apparatus”, *per se*, the disk cartridge limitation appearing in lines 3-4 of claim 6 can only be accorded weight to the extent that it affects the structure of the completed disk recording and/or reproducing apparatus. In this instance, it only affects the structure of the completed disk recording and/or reproducing apparatus such that the disk recording and/or reproducing apparatus must merely be capable of accepting the disk cartridge as claimed.

11. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Eum et al. (US 5,610,890).

Eum et al. (US 5,610,890) teaches a disk recording and/or reproducing apparatus comprising recording and/or reproducing means (includes 119, for instance, in at least an equivalent structural sense) disposed in a chassis (110), the recording and/or reproducing means recording and/or reproducing a disk cartridge (1); a cartridge holder (20) supported on the chassis movably between an insertion/removal position (as shown in FIG. 6, for instance), at which the disk cartridge is inserted or removed, and a recording/reproducing position, at which the disk cartridge is recorded or reproduced by the recording and/or reproducing means (as shown by arrow a2 in FIG. 6, for instance); an eject lever (50) disposed on the chassis (i.e., via cartridge holder) so as to be movable in a disk cartridge insertion/removal direction, the eject lever being pressed by an insertion end of the disk cartridge inserted in the cartridge holder to be moved in the disk cartridge insertion direction (lines 8-10 in column 6, for instance); urge means (includes 53, for instance, in at least an equivalent structural sense) urging the eject lever in the disk cartridge removal direction (as shown in FIG. 5, for instance); and cartridge drop preventive means (includes 100, for instance, in at least an equivalent structural sense) disposed on a side surface plate of the cartridge holder (as shown in FIG. 5, for instance), the cartridge drop preventive means making a sliding contact with a side surface of the disk cartridge stored in the cartridge holder (as shown in FIGS. 12-14, for instance) [as per claim 1]; wherein the apparatus comprises an elastic flap portion (as shown in FIG. 12, for instance) giving the disk cartridge stored in the cartridge holder a braking force; and a protruded portion (102) disposed on a leading end portion of the elastic flap portion (as shown in FIG. 12, for instance), the protruded

portion making a sliding contact with the side surface of the disk cartridge (as shown in FIGS. 12-14, for instance) [as per claim 2]; wherein the disk cartridge includes a recessed portion (12) disposed in part of the side surface thereof; and when storage of the disk cartridge in the cartridge holder is completed, the protruded portion of the cartridge drop preventive means fits into the recessed portion (as shown in FIG. 14, for instance) [as per claim 3]; wherein the disk cartridge further includes a groove portion disposed in part of the side surface thereof (adjacent 12 as shown in FIG. 1A, for instance); and when the disk cartridge is unloaded from the cartridge holder, the protruded portion first makes a sliding contact with the side surface of the disk cartridge (as shown in FIG. 12, for instance) and then would inherently fit into the groove portion [as per claim 4]; wherein the disk cartridge further includes an opening portion (3 or 4) that allows a disk (9) stored to face an outside and a shutter member (5) that is locked in a position of closing the opening portion and disposed so as to be movable between a position of opening the opening portion and the position of closing the opening portion (lines 39-41 in column 1, for instance); and a side surface plate opposing the side surface plate including the recessed portion has a shutter lock release member (22, for instance) for releasing locking of the shutter member [as per claim 5]; wherein the recording and/or reproducing apparatus inherently has the capability of accepting a disk cartridge that has a side surface formed into a wide arc on a side of an insertion end [as per claim 6]; and wherein the cartridge drop preventive means is formed (as shown in FIG. 15, for instance) [as per claim 7].

As the claims are directed to a “disk recording and/or reproducing apparatus”, per se, the method limitation(s) appearing in lines 3-5 of claim 7 can only be accorded weight to the extent that they affect the structure of the completed disk recording and/or reproducing apparatus. Note that “[d]etermination of patentability in ‘product-by-process’ claims is based on product itself, even though such claims are limited and defined by process [i.e., “cutting and raising the side surface plate of the cartridge holder”, for instance], and thus product in such claim is unpatentable if it is the same as, or obvious form, product of prior art, even if prior product was made by a different process.” See *In re Thorpe, et al.*, supra. Furthermore, note that a “[p]roduct-by-process claim, although reciting subject matter of claim in terms of how it is made [i.e., “cutting and raising the side surface plate of the cartridge holder”, for instance], is still product claim; it is patentability of product claimed and not recited process steps that must be established, in spite of fact that claim may recite only process limitations.” See *In re Hirao and Sato*, supra.

Likewise, as the claims are directed to a “disk recording and/or reproducing apparatus”, per se, the disk cartridge limitations appearing throughout the claims can only be accorded weight to the extent that they affect the structure of the completed disk recording and/or reproducing apparatus. In this instance, they only affect the structure of the completed disk recording and/or reproducing apparatus such that the disk recording and/or reproducing apparatus must merely be capable of accepting the disk cartridge as claimed.

Claim Rejections/Considerations - 35 USC § 103

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Pertinent Prior Art

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. This includes Inoue (US 2004/0062175), which teaches a disk recording and/or reproducing apparatus with a cartridge drop preventive member (67) opposite a shutter lock release member (72 on 71); and Ando (US 4,879,616), Tezuka (US 4,887,174), Nakazawa et al. (US 4,901,172), Griffith et al. (US 5,216,558), Handa et al. (US 5,646,926), Tatehata et al. (US 6,172,845), Kojima (US 6,802,069), Kojima et al. (US 6,826,767), Kojima et al. (US 2001/0048572), Kurozuka et al. (US 2002/0159374), and Kanada et al. (US 2004/0004865), which each individually teaches a disk recording and/or reproducing apparatus with a cartridge drop preventive member.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-7580. The examiner can normally be reached on Monday-Tuesday & Thursday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Craig A. Renner
Primary Examiner
Art Unit 2627

CAR